

**PATENT****AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes changes to Fig. 5B (sheet 6/9 of drawings). This sheet, which includes Fig. 5B, replaces the original sheet including Fig. 5B. In Fig. 5B, the typographical error "CB2=1?" has been changed to "CB<sub>2</sub>=1?"

Attachment: Replacement Sheet

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## REMARKS

In the aforementioned Office Action, claims 1-16 were rejected. By this amendment, applicants have amended independent claims 1 and 13, resubmit amended claims 1-16 for the Examiner's reconsideration for reasons as set forth below.

*Objection to the Specification and Drawing*

A typographical error was discovered in Fig. 5B and the drawing was objected to.

Applicants appreciate the Examiner's keen observation. A replacement sheet with the error corrected is submitted herewith pursuant to 37 C.F.R. § 1.121(d). Entry of the amended drawing is respectfully requested.

*Claim Rejections – 35 USC § 102*

Claims 1 – 9 and 13 – 16 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Bark et al.* (U.S. Patent No. 6,553,235). In the rejection, the Examiner basically alleged that all features as claimed by applicants are found in *Bark et al.*

Applicants respectfully disagree. To begin with, applicants believe *Bark et al.*, was grossly misconstrued in rejecting applicants' claims.

*Bark et al.* clearly describes a way congestion control of a cellular telecommunications system by a base station. The base station is, for example, labeled 140a-140n and 140a'-140n' as shown in Fig. 3, and labeled 140a as shown in Fig. 3 of *Bark et al.* To ease congestion, all monitoring and adjustment activities are carried out and originated from the base station. (e.g., see Figs. 5A-6 and relevant paragraphs describing Figs. 5A-6 of *Bark et al.*).

In contrast, applicants' claims concern with data rate adjustment by a mobile station.

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Take applicants' claim 1 for example. Independent claim 1 recites in the preamble "[a] method to determine a next data rate in a mobile station of a wireless system."

A claim preamble has the import that the claim as a whole suggests for it. *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). Here, when applicants' claim 1 is read as a whole, the steps of the claim body are more toward reading as carrying out by the mobile station and not by other entities.

To further define over *Bark et al.*, claim 1 has been amended. Amended claim 1 now recites, *inter alia*, of "generating the next data rate in the mobile station as a function of data rate history and history of the congestion indicator of the mobile station."

There is no teaching of any sort of "generating the next data rate in the mobile station" in *Bark et al.*, much less that the generating is conducted "as a function of data rate history and history of the congestion indicator of the mobile station," as claimed by applicants.

Instead, in *Bark et al.*, the remedial step to alleviate congestion is the change of the alarm threshold value,  $FCC_{AL\_THRES}$ , which is not a data rate parameter but a power parameter (column 4, lines 36-38 of *Bark et al.*). Fig. 6 and the relevant paragraphs explain that if the  $FCC_{AL\_THRES}$  is exceeded, the base station cuts the DL (Down Link) power by the amount  $P_r$  via selectively curtailing power of the mobile stations, and not by "generating the next data rate in the mobile station" as claimed by applicants.

If that is not enough, the basis for curtailing the DL power in *Bark et al.* is via constantly monitoring the downlink power  $P_{DL}$  (column 4, lines 23-40 of *Bark et al.*) and not with reference to "data rate history and history of the congestion indicator" as claimed by applicants.

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In the rejection, the Examiner cited Fig. 5B, column 5, lines 45-59 of *Bark et al.* to support the proposition that changes made in *Bark et al.* is based on "data rate history and congestion indicator history" as in applicants' claim 1.

First, the "offered bit rates" mentioned in column 5, lines 52-56 of *Bark et al.*, is at best interpreted to be the bit rates ready to be used and certainly cannot be construed as "data rate history." Above all, the "offered bit rates" in *Bark et al.* are an aggregation of all bit rates of all the mobile stations, not from a single mobile station as recited in applicants' claim 1. Likewise, there is no "history of the congestion indicator of the mobile station" to speak of in *Bark et al.* If the downlink power  $P_{DL}$  is strainedly interpreted as such, it certainly is not an indicator from the mobile station as claimed in applicants' claim 1, but rather from the base station.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W.L. Gore & Assocs. V. Garlock, Inc.*, 220 USPQ 303, 313. Here, multiple differences exist between applicants' claim 1 and *Bark et al.* Accordingly, claim 1 is not anticipated by *Bark et al.*

Applicants further submit that claim 1 is not rendered obvious in view of *Bark et al.* As mentioned above, claim 1 recites, among other things, of determining the next data rate based on "data rate history and history of the congestion indicator." As such, mobile stations with data transmission in progress are more favored to be allowed to continue with the transmission. Consequently, permitting a small number of users having good links to continue with the transmissions is more preferable than permitting all users having bad links to compete for the limited resources (e.g., see paragraph [1030] of the applicants' disclosure). In *Bark et al.*, the mobile stations 120a-120n merely slavishly follow order from the base station 140a-140n. In fact, in the need of congestion alleviation, depending on its status, i.e., whether it is classified as

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a packet data link, part or all of the connecting downlink power is cut off for each of the mobile stations 120a-120n, all dominated by the base station.

Along the same line of reasoning, the same holds true with independent claim 13. That is, the mobile station of *Bark et al.*, among other things, does not have "means for determining a next data rate for the mobile station as a function of a history of congestion indicators and as a function of data rate history of the mobile station."

For the aforementioned reasons, applicants respectfully submit that independent claims 1 and 13 are patentable over the prior art, including *Bark et al.*

Claims 2-9 and 14-16 are dependent claims which indirectly or indirectly dependent on their respective independent claims 1 and 13, and include additional limitations in addition to the limitations as recited in claims 1 and 13, are submitted to be, *a fortiori*, patentable.

Withdrawal of the rejection on claims 1-9 and 13-16 under 35 U.S.C. § 102 is believed to be in order and is respectfully requested.

*Claim Rejections – 35 USC § 103*

In the aforementioned Office Action, claims 10 – 12 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over of *Bark et al.* in view of *Gilhousen et al.* (U.S. Patent No. 5,603,096).

Claims 10-12 are dependent claims dependent directly or indirectly on claim 1. Independent claims 1 is submitted to be neither anticipated nor rendered obvious by the prior art as set forth above. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ.2d 1596 (Fed.

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Cir. 1988). Accordingly, claims 10-12 are submitted to be nonobvious over the prior art. The Examiner's rejection on these claims should be withdrawn.

## CONCLUSION

The cited but not relied upon references have been studied but found to be less relevant than the relied upon references. In light of the above amendments and remarks, with the correction of the drawing, applicants believe the application is in condition for allowance, reconsideration and an early allowance are respectfully requested. In the event of any fees or overpayments that may be due with this response, please charge to Deposit Account No. 17-0026.

Respectfully submitted,

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